

Revised, Rearticulated, Science Standards for the Tested Grades

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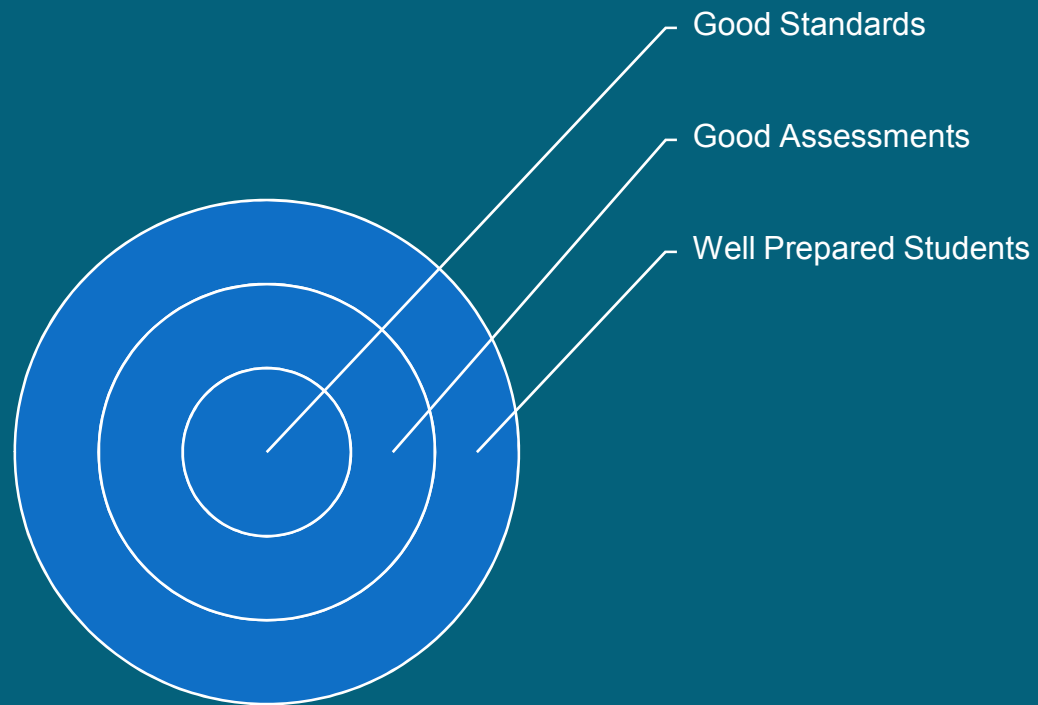
Problems with the Original Standards

- Poor structure
- Incorrect Content

Fix

- Fix Structure
- Fix Content

Impact



Effective Science Pedagogy

Meaningful Understanding

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graph TD; A[Meaningful Understanding] --- B[Language of Science]; A --- C[Scientific Process]; A --- D[Integration & Application]
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Language of Science

Scientific Process

Integration & Application

Major Changes

- B.2.2: Now uses the current three domain classification system of Biology which has replaced the older five kingdom system.
- B.2.4: Recognition that all photosynthesizing organisms are not necessarily plants

Standard 7: Genetics

We now know that the logical construct of a Gene does not correspond to “a set of instructions encoded in the DNA sequence.”

This standard has been rewritten to remove the incorrect information and recast the idea in a manner more consistent with current understanding.

Standard 10: Evolution

It is incorrect to suggest that there is only one “Theory of Evolution” which is often taken to include a theory of the Origin of Life. It is important that students are exposed to multiple Scientific theories of the origin of life and the evolution of life forms. It is also important that students engage in discussion as to the strengths and weaknesses of these theories.

Review Cycle

- Those who always seek to follow can never lead
- The A+ countries that use state wide assessments review their standards and publish new guides every year
- If DC wants to join that club the requirements are clear

Why do Schools of Education in the District not use the State Standards?

“We have not used the DCPS Science Standards because they contain too many scientific inaccuracies.”

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Thank you!!

We hope that State Board will adopt these Revised and Rearticulated Science Standards.

“At GW we are excited that the Revised and Rearticulated Science Standards are up to date, scientifically accurate, and possess a clarity of language that will be helpful to students, parents, and teachers.”